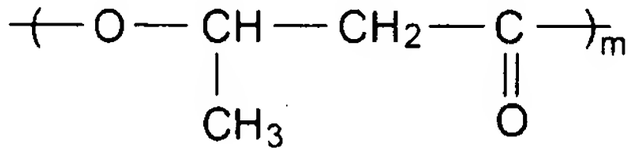
AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for exhibiting orientation-induced rubber-elasticity and temperature-sensitive shape memory effects from preparing a poly(3-hydroxyalkanoate) ("PHA") block copolymer ~~having orientation-induced rubber-elasticity and temperature-sensitive shape memory effects~~,

wherein the PHA block copolymer comprises:

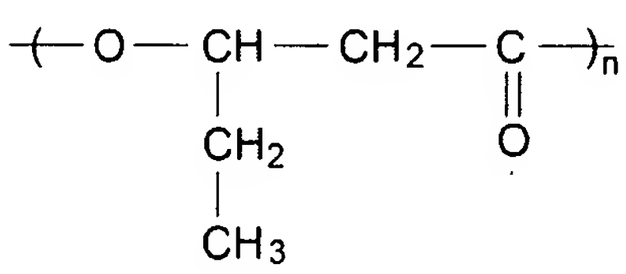
a plurality of 3-hydroxybutyrate (3HB) blocks of Formula 1 as a repeating unit:



(Formula 1)

wherein m is not less than 2; and

a plurality of 3-hydroxyvalerate (3HV) blocks of Formula 2 as a repeating unit:



(Formula 2)

wherein n is not less than 2; and

wherein ~~the PHA block copolymer is prepared by~~ the method ~~comprising~~ comprises the following steps:

(a) biosynthesizing the PHA block copolymer by culturing a *Pseudomonas* sp. HJ-2 strain ~~(Accession No. KCTC 040 6 BP)~~ deposited as Accession No. KCTC 0406BP using saturated and/or unsaturated carboxylic acid as a carbon source;

(b) extracting the PHA block copolymer by crushing the culture;

(c) heating the PHA block copolymer to a temperature ranging from a melting point to thermal decomposition temperature thereof, thereby preparing a permanently deformed particular shaped PHA block copolymer; ~~and~~

(d) ~~subjected~~ subjecting the permanently deformed particular shaped PHA block copolymer to a constant external force at near room temperature for a predetermined period of time, thereby forming a PHA block copolymer having a temporary shape;~~.~~

(e) heating the PHA block copolymer having a temperature shape to a temperature ranging from a glass transition temperature to melting point thereof, whereby a temporarily shaped PHA block copolymer is recovered to its original state of the permanently shaped material.

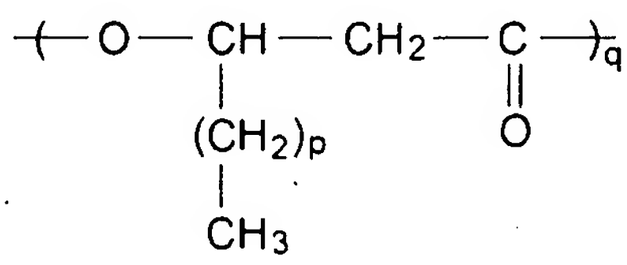
2. (Canceled)

3. (Previously Presented) The method for preparing the PHA block copolymer according to claim 1, wherein the temporarily shaped PHA block copolymer is rapidly recovered to its original state of the permanently shaped PHA block copolymer by heating the temporarily shaped PHA block copolymer to a temperature ranging from a glass transition temperature to melting point thereof.

4. (Previously Presented) The method for preparing the PHA block copolymer according to claim 1, wherein the content of 3HV in the total monomers of the copolymer is within the range of 10 to 90 mol%.

5. (Previously Presented) The method for preparing the PHA block copolymer according to claim 1, wherein the molecular weight of the copolymer is in the range of several tens of thousands to several million g/mol.

6. (Previously Presented) The method for preparing the PHA block copolymer according to claim 1, wherein the copolymer further comprises not more than 70 mol% of a hydroxy acid repeating group of Formula 3, based on the total polymer:



(Formula 3)

wherein p and q are independently not less than 2.

7-8. (Canceled)

9. (Currently Amended) The method for preparing the PHA block copolymer according to claim 1, wherein the PHA block copolymer is prepared by culturing the *Pseudomonas* sp. HJ-2 strain with ~~supply of~~ heptanoic acid as a sole carbon source.

10-19. (Cancelled)